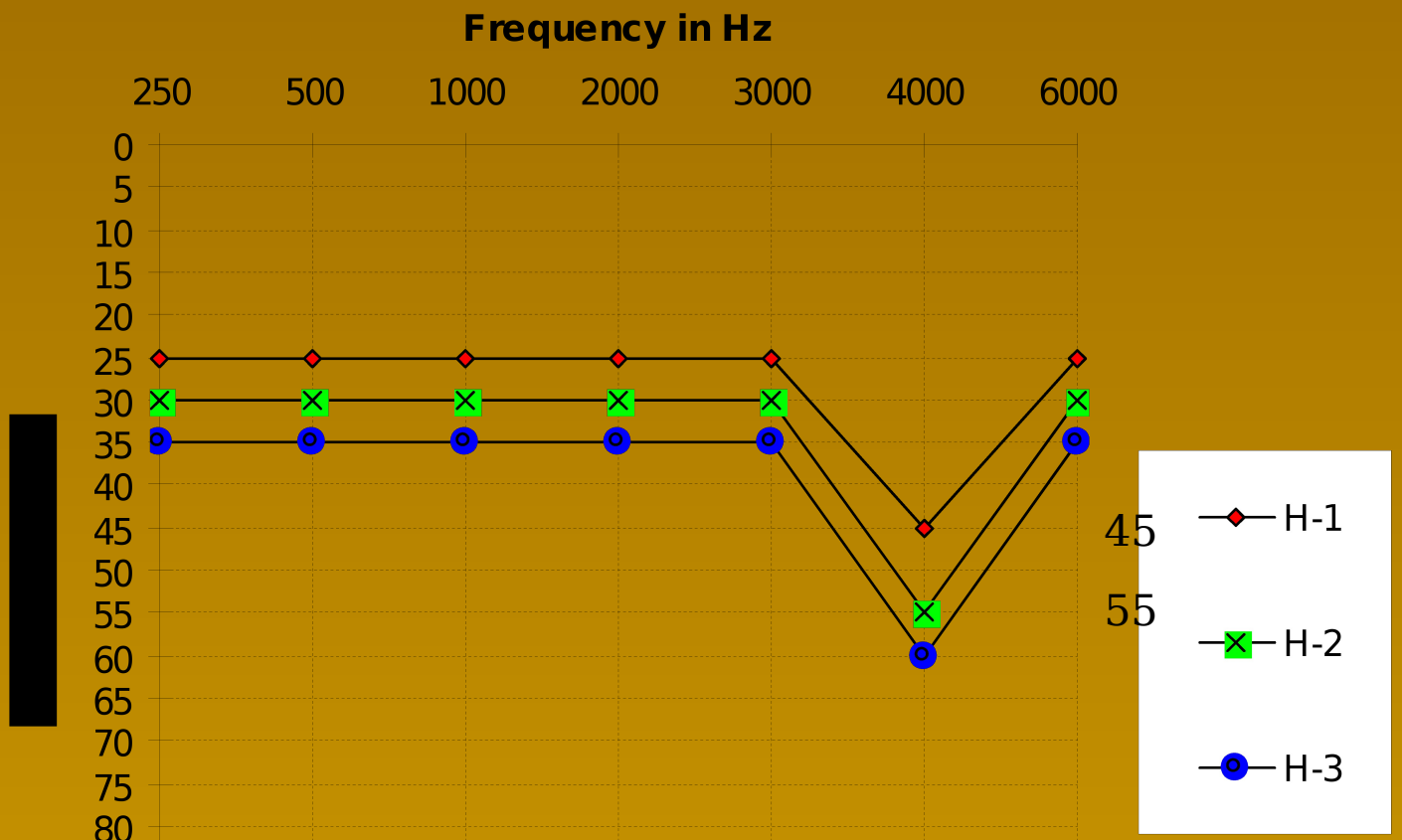
Hearing Conservation

Hearing Profiles & Hearing Loss: Their Impact on Combat Operations

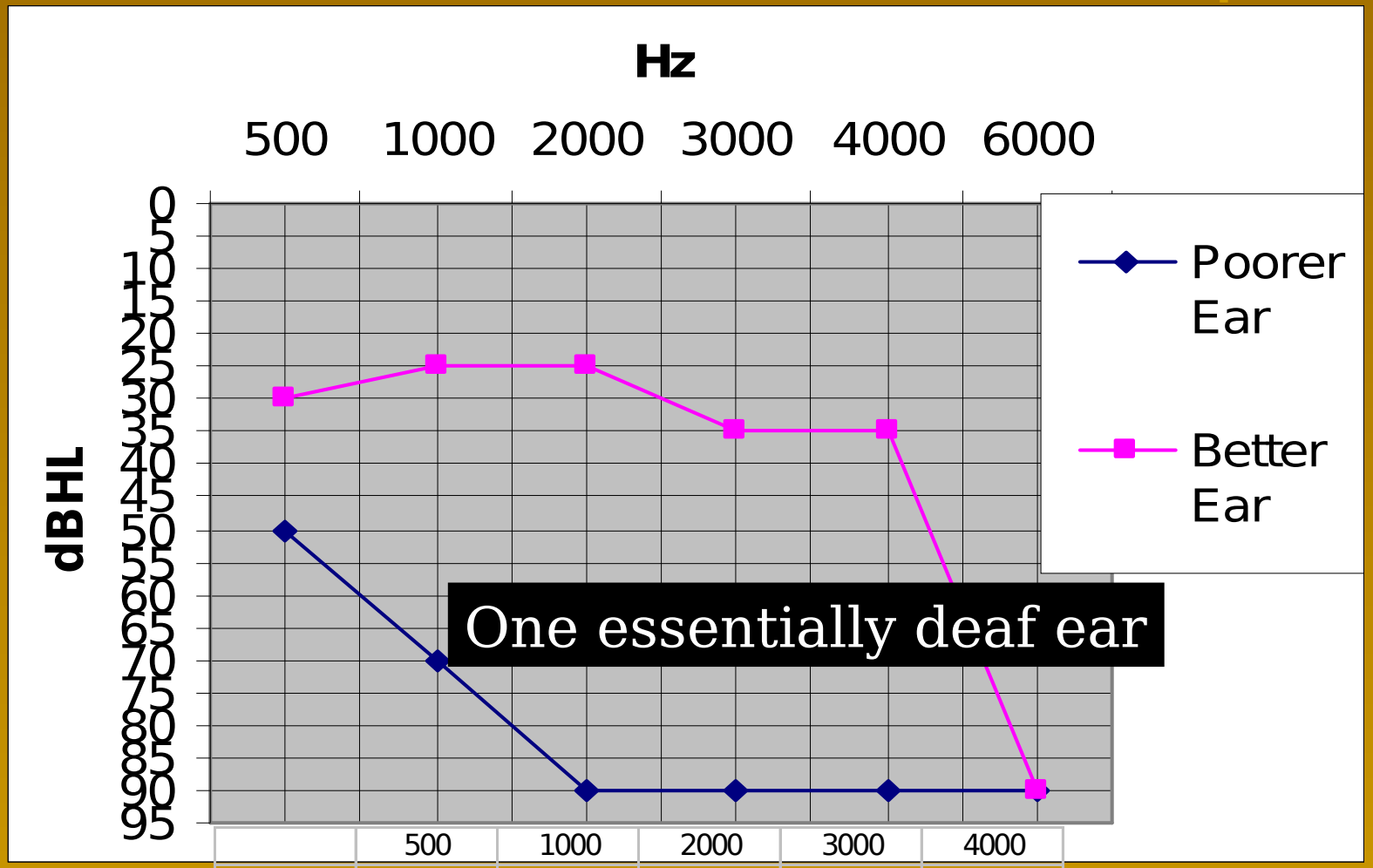
Hearing Profile Audiogram



	500	1000	2000	4000
H-1	25	25	25	30
H-2	30	30	30	55
H-3	35	35	35	55

Unilateral Profound Hearing Loss-

Still H-2 if better ear thresholds are less or equal to



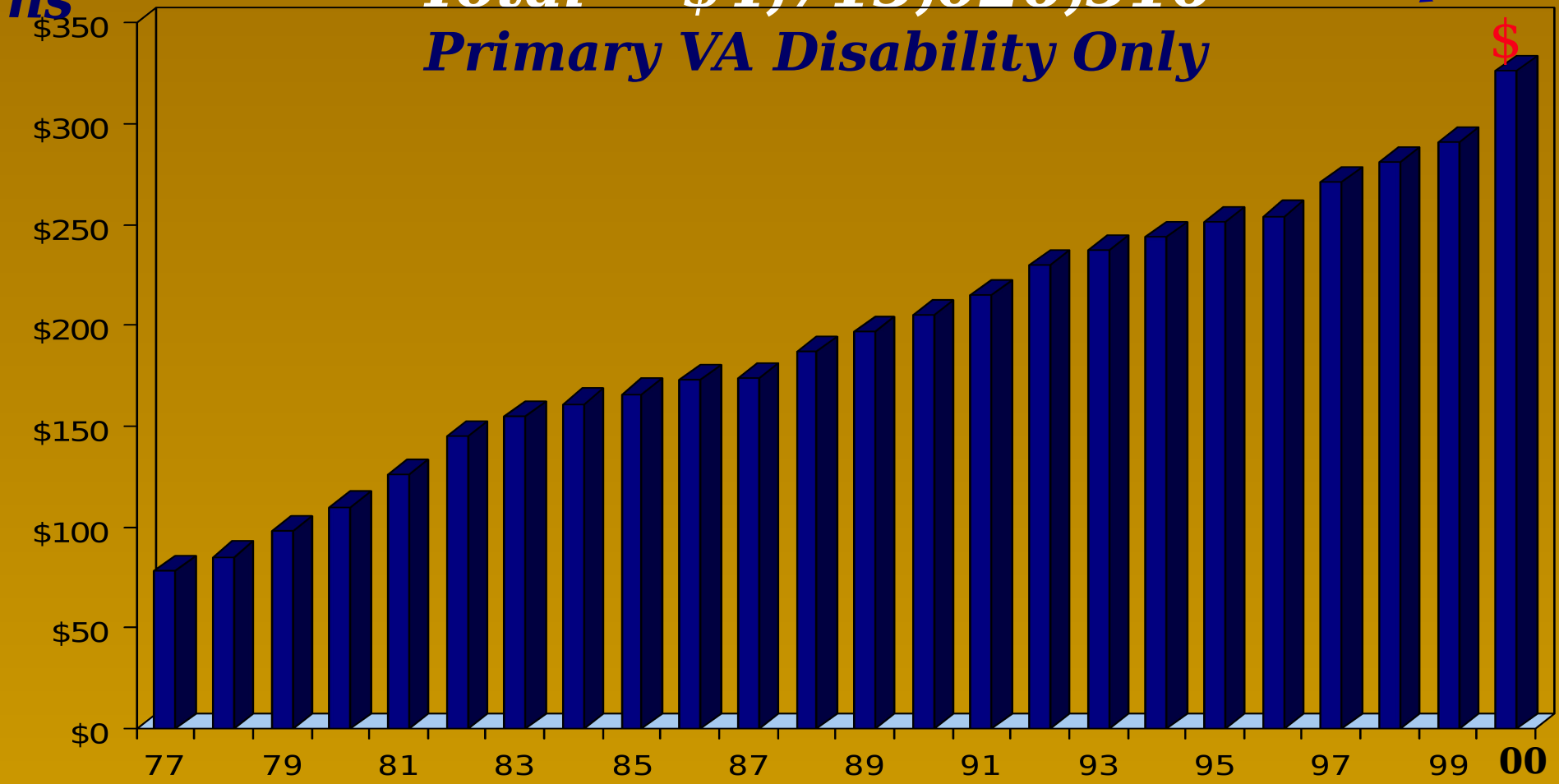
	500	1000	2000	3000	4000
Poorer Ear	50	70	90	90	90
Better Ear	30	25	25	35	35

Cost of Hearing Loss for All Veterans

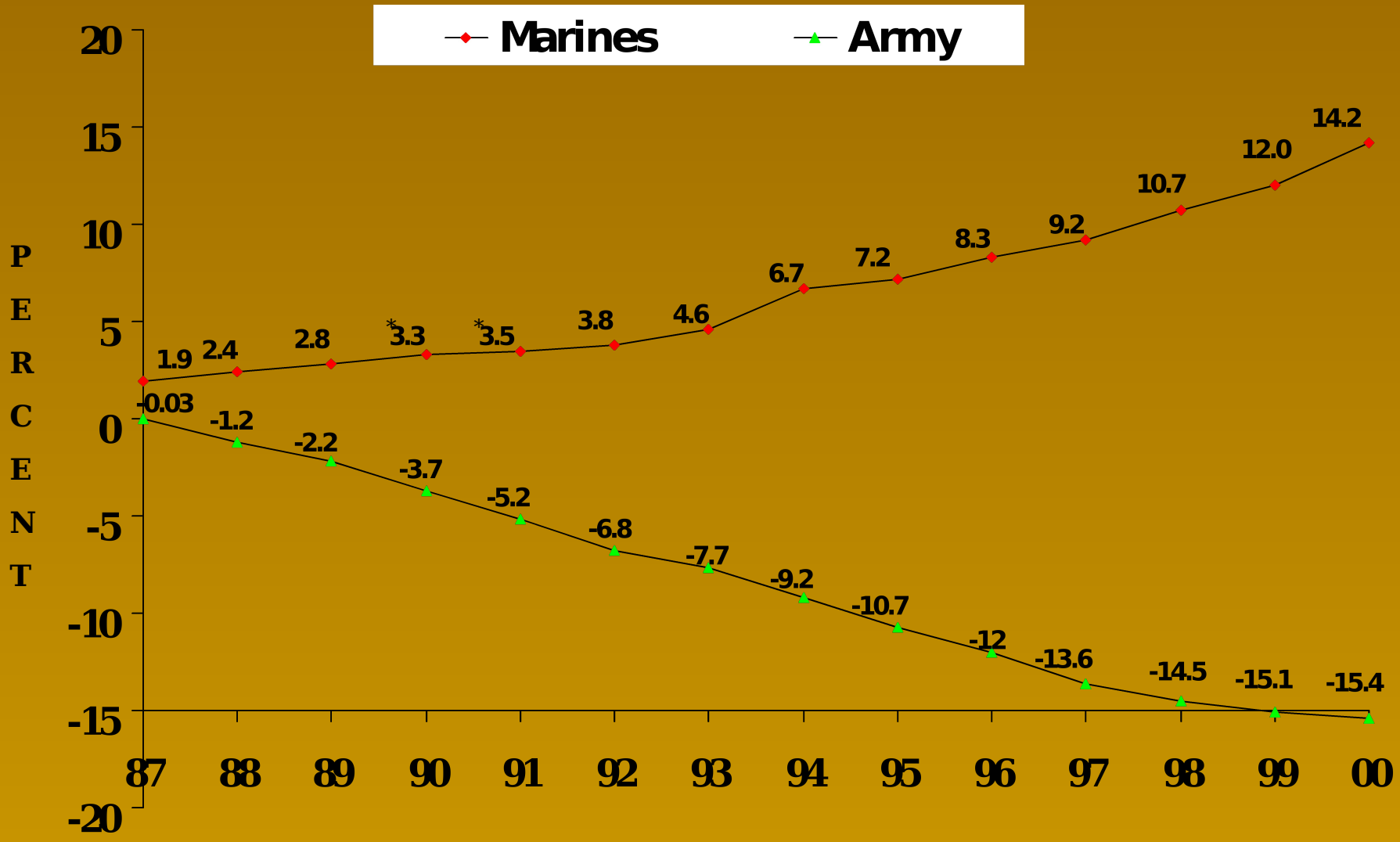
1977-2000

Total = $4,713,026,316

Primary VA Disability Only



Army/Marine VA Major Hearing Loss Disability Cases Percent of Change Since 1986



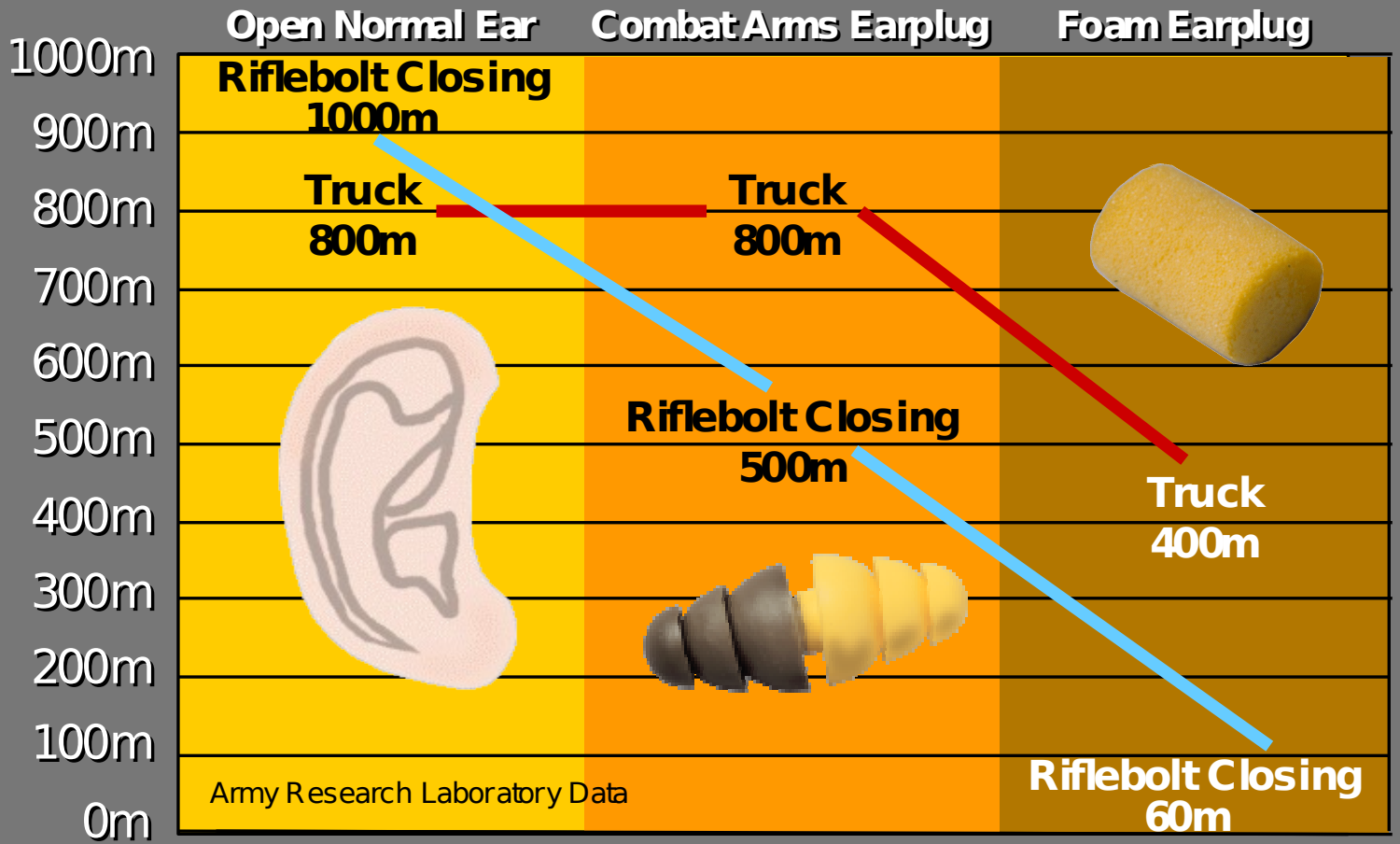
*Extrapolated

The Problem and the Ideal Solution

"Earplugs or muffs appear to be counter-indicated, with regard to speech communication in the situation where they are probably needed most – namely, in the presence of intermittent, impulsive noise, such as gunfire. Here, the wearer of earplugs or muffs cannot hear weak speech during silent intervals between impulses. The ideal solution would be a nonlinear device that would let weak sounds through at full strength but would attenuate intense sounds."

K.D. Kryter, The Effects of Noise on Man (1970) Academic Press pp. 68-69

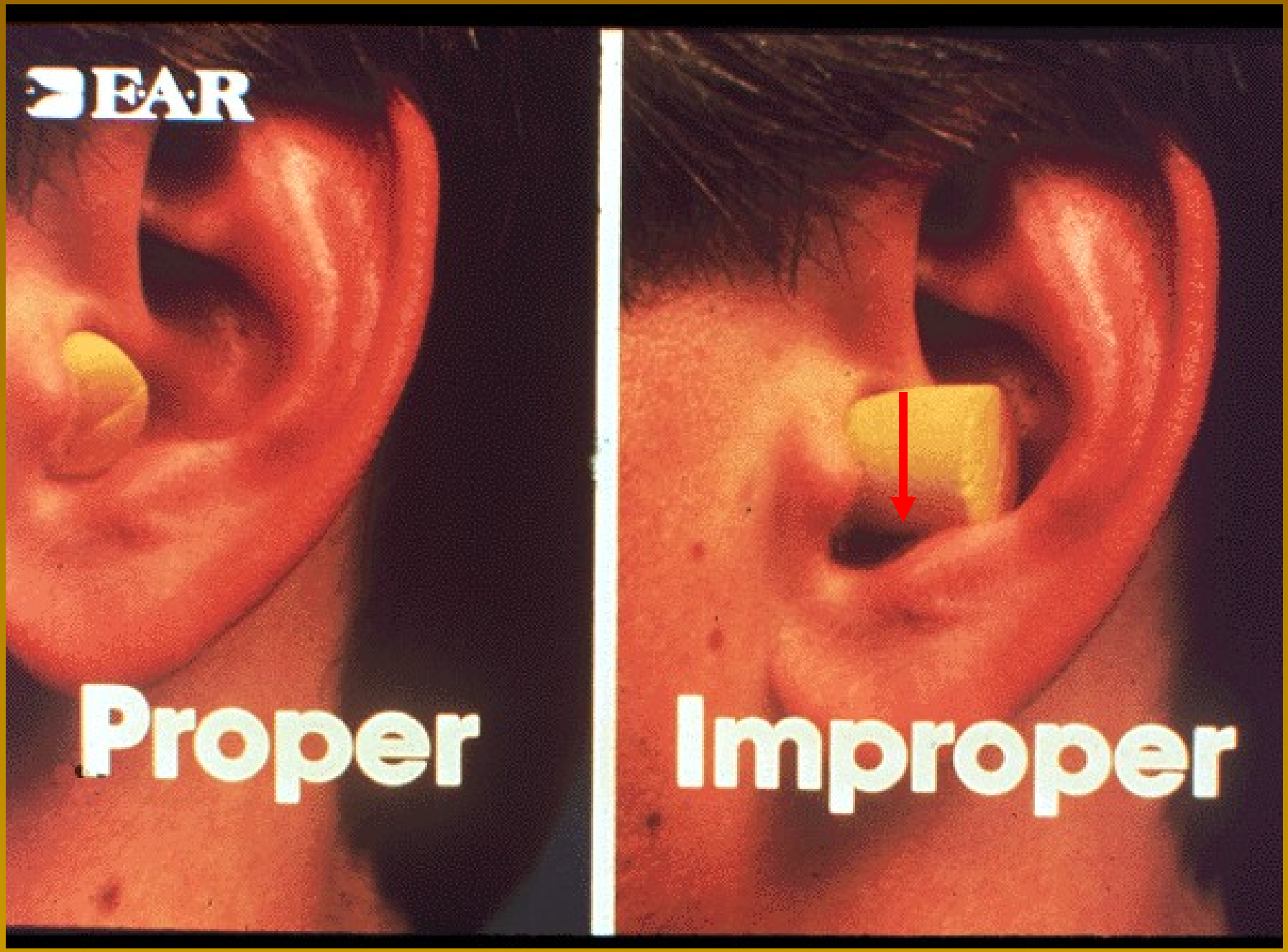
Detection of Sound by



Low Suburban Environmental Noise with Acceptable (H-1 Profile) Hearing Ability

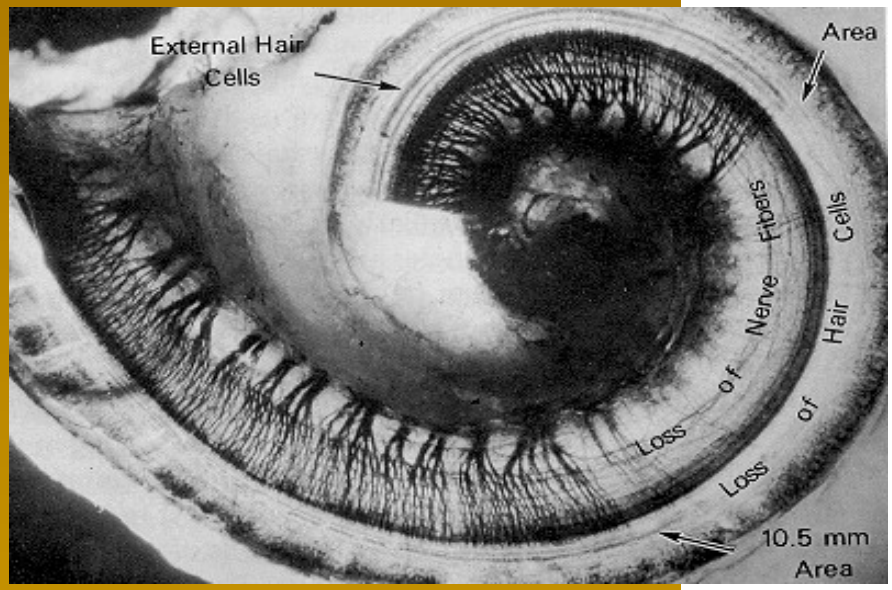
USACHPPM

CVC Helmets – Hearing Protection is Effective ONLY when Chin Strap is Secured!!


EAR
Proper
Improper

Safety of Persons = The Prevention of Injury

Hearing loss caused by noise-exposure / trauma results in injury!



Damaged Hair Cells

Damaged hair cells in the various bundles means loss of sound perception

HEARING CONSERVATION

STANDARDS FOR HEARING CONSERVATION

Army – DA PAM 40-501

- **Program Requirements of Noise-exposed soldiers in**
  - **Annual Hearing Conservation Health Education**
  - **Annual Earplug fit check**
  - **Annual hearing test recorded on DD Form 2215 o**
- **If Annual hearing test shows change in hearing, sol**

are *required to return for follow-up testing.*